

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Darsillo et al.

Application No. 09/670,118

Filed: September 26, 2000

For: RECORDING MEDIUM

Art Unit: 1773

Examiner: Bernatz, Kevin M.

**PENDING CLAIMS AFTER AMENDMENTS  
MADE IN RESPONSE TO OFFICE ACTION DATED NOVEMBER 1, 2002**

1. An ink-jet recording medium comprising a substrate having a glossy coating thereon, the glossy coating comprising fumed alumina particles and a binder, wherein the fumed alumina particles have a surface area of about 30-80 m<sup>2</sup>/g, and the glossy coating has a 75° specular gloss of about 15% or more.
2. The ink-jet recording medium of claim 1, wherein the substrate comprises a polymer or cellulose paper.
3. The ink-jet recording medium of claim 1, wherein the substrate comprises poly(ethylene terephthalate).
5. The ink-jet recording medium of claim 1, wherein the fumed alumina particles have a mean diameter of about 1 μm or less.
7. The ink-jet recording medium of claim 1, wherein the alumina to binder ratio is about 2:1 by weight or more.

27. An ink-jet recording medium prepared by a method comprising
- (a) providing a substrate,
  - (b) coating the substrate with a coating composition comprising fumed alumina particles and a binder, wherein the fumed alumina particles have a surface area of about 30-80 m<sup>2</sup>/g, and the solids content of the alumina in the composition is about 10 wt.% or more, and
  - (c) drying the coated substrate to provide the ink-jet recording medium.
28. The ink-jet recording medium of claim 27, wherein the coating composition has a solids content of alumina in the composition of about 20 wt.% or more.
29. The ink-jet recording medium of claim 5, wherein the fumed alumina particles have a mean diameter of about 80-300 nm.
30. The ink-jet recording medium of claim 29, wherein the fumed alumina particles have a mean diameter of about 100-200 nm.
33. The ink-jet recording medium of claim 1, wherein the fumed alumina particles have a surface area of about 40-60 m<sup>2</sup>/g.
44. The ink-jet recording medium of claim 7, wherein the alumina to binder ratio is about 7:1 by weight or more.
45. The ink-jet recording medium of claim 44, wherein the alumina to binder ratio is about 9:1 by weight or more.
46. The ink-jet recording medium of claim 1, wherein the glossy coating has a 75° specular gloss of about 65% or more.
47. The ink-jet recording medium of claim 1, wherein the glossy coating has a total mercury intrusion volume of about 0.3 ml/g or more.
48. The ink-jet recording medium of claim 47, wherein the glossy coating has a total mercury intrusion volume of about 0.8 ml/g or more.

49. The ink-jet recording medium of claim 27, wherein the fumed alumina particles have a mean diameter of about 1  $\mu\text{m}$  or less.

50. The ink-jet recording medium of claim 49, wherein the fumed alumina particles have a mean diameter of about 80-300 nm.

51. The ink-jet recording medium of claim 50, wherein the fumed alumina particles have a mean diameter of about 100-200 nm.

52. The ink-jet recording medium of claim 27, wherein the alumina to binder ratio is about 2:1 by weight or more.

53. The ink-jet recording medium of claim 52, wherein the alumina to binder ratio is about 9:1 by weight or more.

55. The ink-jet recording medium of claim 27, wherein the glossy coating has a 75° specular gloss of about 65% or more.

56. The ink-jet recording medium of claim 27, wherein the glossy coating has a total mercury intrusion volume of about 0.3 ml/g or more.

57. The ink-jet recording medium of claim 56, wherein the glossy coating has a total mercury intrusion volume of about 0.8 ml/g or more.